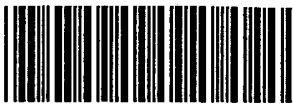

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RAW SEQUENCE LISTING DATE: 10/12/2004
PATENT APPLICATION: **US/09/993,292B** TIME: 12:06:10

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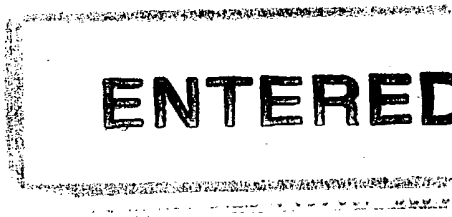


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 3 <110> APPLICANT: University of Maryland, Baltimore
 4       GALEN, James E.
 6 <120> TITLE OF INVENTION: USE OF CLYA HEMOLYSIN FOR EXCRETION OF PROTEINS
 8 <130> FILE REFERENCE: A8461
10 <140> CURRENT APPLICATION NUMBER: 09/993,292B
11 <141> CURRENT FILING DATE: 2001-11-23
13 <150> PRIOR APPLICATION NUMBER: US 60/252,516
14 <151> PRIOR FILING DATE: 2000-11-22
16 <160> NUMBER OF SEQ ID NOS: 28
18 <170> SOFTWARE: PatentIn version 3.3
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23 <213> ORGANISM: Artificial Sequence
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26 <223> OTHER INFORMATION: pSEC84 Expression Plasmid
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33 taaagttaat gatgatagcg ggagttattc tagttgcgag tgaaggtttt gttttgacat    180
35 tcagtgctgt caaatactta agaataagtt attgatttta accttgaatt attattgctt    240
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39 ttttgaaaca tctatagcga taaatgaaac atcttaaaag ttttagtatc atattcgtgt    360
41 tggattattc tgcatttttg gggagaatgg acttgccgac tgattaatga gggttaatca    420
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53 ttatggacag ccaggacaag tattttgaag cgacacaaac tgtttatgaa tggtgtggtg    780
55 tcgtgacgca attactctca gcgtatattt tactatttga tgaatataat gagaaaaaag    840
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59 aagcgcaaaa atctctcctg acaagttcac aaagtttcaa caacgcttcc ggaaaactgc    960
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93 cactagaagg acagtatttg gtatctgcgc tctgctgaag ccagttacct tcggaaaaag 1980
95 agttggtagc tcttgatccg gcaaacaaac caccgctggt agcggtggtt tttttgtttg 2040
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229 caatagtcac tcaatcctct tcacaacaag agcaaaaaag tgatgaagag accaaaaaaa   6060
231 atgcgatgaa gctaataaat taattcaatt attattgagt tccctttatc cactatcagg   6120
233 ctggataaag ggaactcaat caagttattt tcttaccagt cattacataa tcgttattat   6180
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252             20                  25                  30
255 Gln Val Ile Pro Trp Lys Thr Phe Asp Glu Thr Ile Lys Glu Leu Ser
256         35                  40                  45
259 Arg Phe Lys Gln Glu Tyr Ser Gln Glu Ala Ser Val Leu Val Gly Asp
260     50                  55                  60
263 Ile Lys Val Leu Leu Met Asp Ser Gln Asp Lys Tyr Phe Glu Ala Thr
264 65                  70                  75                  80
267 Gln Thr Val Tyr Glu Trp Cys Gly Val Val Thr Gln Leu Leu Ser Ala
268                 85                  90                  95
271 Tyr Ile Leu Leu Phe Asp Glu Tyr Asn Glu Lys Lys Ala Ser Ala Gln
272             100                 105                 110
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275 Lys Asp Ile Leu Ile Arg Ile Leu Asp Asp Gly Val Lys Lys Leu Asn
276         115                 120                 125
279 Glu Ala Gln Lys Ser Leu Leu Thr Ser Ser Gln Ser Phe Asn Asn Ala
280     130                 135                 140
283 Ser Gly Lys Leu Leu Ala Leu Asp Ser Gln Leu Thr Asn Asp Phe Ser
284 145                 150                 155                 160
287 Glu Lys Ser Ser Tyr Phe Gln Ser Gln Val Asp Arg Ile Arg Lys Glu
288                 165                 170                 175
291 Ala Tyr Ala Gly Ala Ala Ala Gly Ile Val Ala Gly Pro Phe Gly Leu
292             180                 185                 190
295 Ile Ile Ser Tyr Ser Ile Ala Ala Gly Val Ile Glu Gly Lys Leu Ile
296         195                 200                 205
299 Pro Glu Leu Asn Asn Arg Leu Lys Thr Val Gln Asn Phe Phe Thr Ser
300     210                 215                 220
303 Leu Ser Ala Thr Val Lys Gln Ala Asn Lys Asp Ile Asp Ala Ala Lys
304 225                 230                 235                 240
307 Leu Lys Leu Ala Thr Glu Ile Ala Ala Ile Gly Glu Ile Lys Thr Glu
308                 245                 250                 255
311 Thr Glu Thr Thr Arg Phe Tyr Val Asp Tyr Asp Asp Leu Met Leu Ser
312             260                 265                 270
315 Leu Leu Lys Gly Ala Ala Lys Lys Met Ile Asn Thr Cys Asn Glu Tyr
316         275                 280                 285
319 Gln Gln Arg His Gly Lys Lys Thr Leu Phe Glu Val Pro Asp Val Ala
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323 Ser
324 305
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330 <213> ORGANISM: Artificial Sequence
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333 <223> OTHER INFORMATION: Cloning Primer
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342 <211> LENGTH: 101
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: Cloning Primer
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352 ttggtattca ttacaggtgt taatcatttt ctttgcagct c                       101
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358 <213> ORGANISM: Artificial Sequence
360 <220> FEATURE:
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PATENT APPLICATION: **US/09/993,292B** TIME: 12:06:10

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Output Set: **N:\CRF4\10122004\I993292B.raw**

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371 <212> TYPE: DNA
372 <213> ORGANISM: Artificial Sequence
374 <220> FEATURE:
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377 <400> SEQUENCE: 6
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401 <223> OTHER INFORMATION: Cloning Primer
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414 <220> FEATURE:
415 <223> OTHER INFORMATION: Cloning Primer
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420 ctagctcatg tttgacagct tatcatcgat aacctttaat g                       101
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425 <212> TYPE: DNA
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VERIFICATION SUMMARY DATE: 10/12/2004
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